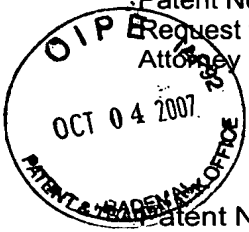


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Cofe



Patent No. 7,253,129
Request for Cert. of Correction dated October 2, 2007
Attorney Docket No. 4174-050605

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : 7,253,129 Confirmation No. 5651
Inventor : Takagimi et al.
Issued : August 7, 2007
Title : Rare Earth Garnet Sintered Compact
Examiner : David Sample
Customer No. : 28289

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT
FOR PTO MISTAKE (37 C.F.R. 1.322(a))

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate

OCT 09 2007

of Correction

ATTENTION: Decision and Certificate of Correction Branch
Patent Issue Division

Sir:

In accordance with 35 U.S.C. §254, we attach hereto Form PTO/SB/44 and a copy of proof of PTO's error and request that a Certificate of Correction be issued in the above-identified patent. The following error appears in the patent as printed:

Face of the Patent, See Item (54) the Title: "RARE EARTH GARNET SINTERED COMPACT" should read – RARE EARTH **GARNET** SINTERED COMPACT –
(See page 1 of the application as filed, the Corrected Filing Receipt mailed 05/15/2007, and the Issue Fee Transmittal mailed on June 28, 2007, which also corrected the title.)

Respectfully submitted,

THE WEBB LAW FIRM

By James G. Porcelli
James G. Porcelli
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Pittsburgh, PA 15219
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OCT 9 2007

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

Page 1 of 1

PATENT NO. : 7,253,129
APPLICATION NO. : 10/525,162
ISSUE DATE : August 7, 2007
INVENTORS : Takagimi et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Face of the Patent, See Item (54) the Title:

"RARE EARTH GARNET SINTERED COMPACT" should read
- RARE EARTH **GARNET** SINTERED COMPACT -

MAILING ADDRESS OF SENDER: The Webb Law Firm
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219

OCT 9 2007

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-2450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select Option 2.



Specification

Rare earth garnet sintered compact and manufacturing method thereof

Technical Field

This invention relates to a sintered compact of a polycrystalline rare earth garnet, which is used as a laser material such as YAG laser and an optical material such as a mirror and a prism, and a manufacturing method thereof. YAG is an abbreviation of yttrium aluminium garnet having a composition of $\text{Y}_3\text{Al}_5\text{O}_{12}$.

Technical Background

It was proposed to use a polycrystalline sintered compact such as YAG as an optical material for a scintillator. For example, Greskovich et al. (USP 5013696) disclosed presintering a rare earth oxide mold, which has the composition of 67 mol% Y_2O_3 , 3 mol% Eu_2O_3 , and 30 mol% Gd_2O_3 , in a hydrogen atmosphere at 1625 deg C for 4 hours followed by HIP (hot isostatic pressing) at 1650 deg C for 1 hour in an Ar atmosphere of 170 MPa and finally, re-sintering at 1850 deg C for 2 hours in a wet hydrogen atmosphere (USP 5013,696).

The rare earth oxide sintered compact obtained by presintering has a density ranging from 97% to 99% of a theoretical density and the sintered compact subjected to HIP becomes more compact to reduce the number of pores. The sintered compact subjected to HIP shows not prominent increase of an average crystallite diameter as reported in that the average crystal crystallite diameter after HIP ranges from 2 to 4 μm . Resintering increases the average crystallite diameter of the sintered compact to 25 or more micrometers and squeezes bubbles by using grain growth and clearness of the sintered compact increases. The sintered compact after resintering was reported as having the light loss coefficient of 2.93 cm^{-1} .

Ikesue et al. (J. Am. Ceram. Soc. 79 [7]: 1927-1933. (1996)) reported manufacture of a YAG sintered compact added with Nd. The YAG sintered compact was presintered at 1600 deg C for 3 hours in a vacuum, subjected to

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

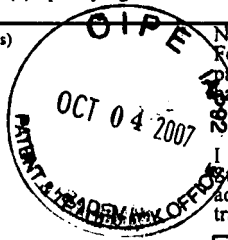
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

28289

7590

04/19/2007

THE WEBB LAW FIRM, P.C.
 700 KOPPERS BUILDING
 436 SEVENTH AVENUE
 PITTSBURGH, PA 15219



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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Christine A. Canavan

(Depositor's name)

(Signature)

June 28, 2007

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,162	02/22/2005	Yanagitani Takagimi	4174-050605	5651

TITLE OF INVENTION: ~~RARE EARTH GARNET SINTERED COMPACT~~

RARE EARTH GARNET SINTERED COMPACT AND MANUFACTURING METHOD THEROF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$0	\$1700	07/19/2007

EXAMINER	ART UNIT	CLASS-SUBCLASS
SAMPLE, DAVID R	1755	501-152000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. _____
 2. THE WEBB LAW FIRM
 3. _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

KONOSHIMA CHEMICAL CO., LTD.

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

2-7, KORAIBASHI 4-CHOME

CHUO-KU, OSAKA-SHI, OSAKA 541-0043 JAPAN

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☒ Issue Fee

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☐ Payment by credit card. Form PTO-2038 is attached.

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5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

James G. Porcelli

Date June 28, 2007

Typed or printed name

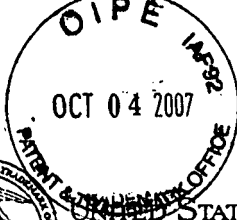
James G. Porcelli

Registration No. 33,757

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APPL NO.	FILING OR 371(c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLMS	IND CLMS
10/525,162	02/22/2005	1755	900	4174-050605	4	2

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CONFIRMATION NO. 5651
CORRECTED FILING RECEIPT



OC000000023863740

Date Mailed: 05/15/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Yanagitani Takagimi, Takuma-cho, Mitoyo-gun, JAPAN;
 Yagi Hideki, Mitoyo-gun, JAPAN;

Power of Attorney: The patent practitioners associated with Customer Number 28289.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP03/00750 01/27/2003

Foreign Applications

If Required, Foreign Filing License Granted: 05/14/2007

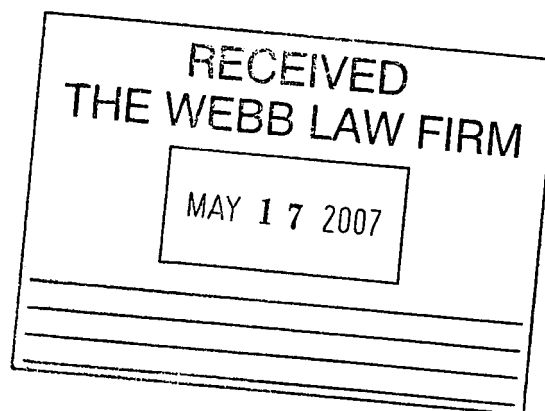
OCT 9 2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/525,162**

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No



Title

RARE EARTH GARNET SINTERED COMPACT AND MANUFACTURING METHOD THEREOF

Preliminary Class

501

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OCT 9 2007

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